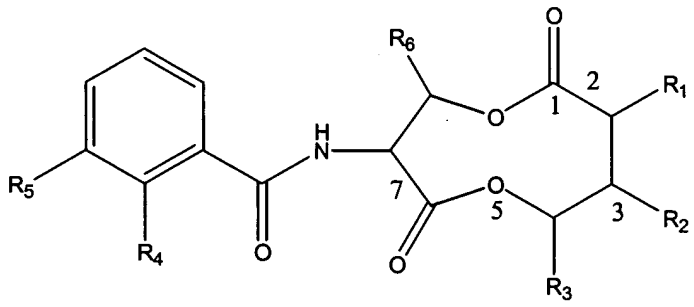
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.-10. (Canceled)

11. (Previously presented) An apoptotic composition that induces apoptosis by binding to a Bcl-2 family member protein and preferentially inducing apoptosis in a cell that over-expresses the Bcl-2 family member protein, the composition having the following formula II,



(II)

having an absolute configuration of [2R, 3R, 4S, 7S, 8R], and wherein

R_1 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_1-C_8 di- or tri-amine, a C_1-C_8 amide, a C_1-C_8 carboxylic acid, or a substituted alkyl group;

R_2 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_1-C_8 di- or tri-amine, a C_1-C_8 amide, a C_1-C_8 carboxylic acid, or a substituted alkyl group;

R_3 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_1-C_8 di- or tri-amine, a C_1-C_8 amide, a C_1-C_8 carboxylic acid, or a substituted alkyl group;

R_4 is hydrogen, a C_1-C_8 linear or branched alkane, a C_1-C_8 hydroxyalkane, or a substituted alkyl group;

R_5 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_3-C_8 di- or tri-alkylamine, a C_1-C_8 carboxylic acid, a C_2-C_8 amide, or a substituted alkyl group; and

R_6 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_1-C_8 di- or tri-amine, a C_1-C_8 amide, a C_1-C_8 carboxylic acid, or a substituted alkyl group.

12. (Previously presented) The composition of claim 11, further comprising a pharmaceutically acceptable carrier.

13. (Previously presented) The composition of claim 11 for use in treating an apoptosis-associated disease in a subject in need thereof.

14. (Canceled)

15. (Previously presented) A method for identifying a composition which induces apoptosis of a cell wherein the composition binds to the hydrophobic pocket of Bcl-x_L or Bcl-2 formed by the BH1, BH2 and BH3 domains of the protein, comprising:

a) admixing a candidate compound with a cell which over-expresses Bcl-x_L or Bcl-2;

b) admixing the candidate compound with a control cell which does not over-express Bcl-x_L or Bcl-2; and

c) determining whether the candidate compound induces the activity of Bcl-x_L or Bcl-2 to produce a physiological change in the cell which over-expresses Bcl-x_L or Bcl-2 indicative of apoptosis, but does not produce a substantial physiological change in the cell which does not over-express Bcl-x_L or Bcl-2.

16. (Canceled)

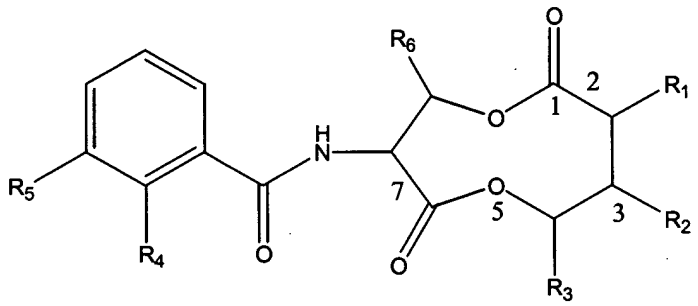
17. (Original) The method of claim 15, wherein the physiological change indicative of apoptosis is cell shrinkage, chromosome condensation and migration, mitochondrial swelling, or disruption of mitochondrial transmembrane potential.

18. (Original) The method of claim 17, wherein the cellular change comprises disruption of mitochondrial transmembrane potential.

19. (Previously presented) The method of claim 15, wherein the cell that over-expresses Bcl-x_L or Bcl-2 is transfected with a gene which encodes Bcl-x_L or Bcl-2.

20. (Canceled)

21. (Currently amended) A method for treating a subject having an apoptosis-associated disease, comprising administering to the subject a therapeutically effective amount of a composition, wherein the composition comprises an antimycin ~~or antimycin derivative is~~ of the following formula, and having an absolute configuration of [2R, 3R, 4S, 7S, 8R]:



(II)

wherein R_1 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_1-C_8 di- or tri-amine, a C_1-C_8 amide, a C_1-C_8 carboxylic acid, or a substituted alkyl group;

R_2 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_1-C_8 di- or tri-amine, a C_1-C_8 amide, a C_1-C_8 carboxylic acid, or a substituted alkyl group;

R_3 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_1-C_8 di- or tri-amine, a C_1-C_8 amide, a C_1-C_8 carboxylic acid, or a substituted alkyl group;

R_4 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 carboxylic acid, or a substituted alkyl group;

R_5 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_1-C_8 di- or tri-alkylamine, a C_1-C_8 amide, a C_1-C_8 carboxylic acid, or a substituted alkyl group; and

R_6 is hydrogen, a C_1-C_8 linear or branched alkane, hydroxyl, a C_1-C_8 hydroxyalkane, amino, a C_1-C_8 di- or tri-amine, a C_1-C_8 amide, a C_1-C_8 carboxylic acid, or a substituted alkyl group.

22. (Original) The method of claim 21, wherein the antimycin derivative is 2-methoxy ether antimycin A or A_3.

23. (Canceled)

24. (Previously presented) The method of claim 21, wherein the subject is human.

25. (Previously presented) The method of claim 21, further comprising administering a pharmaceutical carrier.

26. (Previously presented) The method of claim 21, wherein the administration is intravenous, subcutaneous, intramuscular, intradermal, transdermal, intrathecal, intracerebral, intraperitoneal, epidural or oral.